



## Operations Guide **ZX690**

**DVD / CD / MP3 / MP4 / AM / FM / WEATHER BAND  
HIGH POWER DIGITAL SURROUND SOUND**

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## ZX690 Features

### CD/MP3/MP4/DVD Disc Player

Compatible with standard size CD, MP3, MP4 and DVD discs (4.75" or 12cm). The ZX690 is designed to read standard CD, MP3, MP4, DVD, DVD+R, DVD-R Disc. Because of variations in recording methods some discs may not play on this unit. This unit will play region 1 DVD's (USA and Canada).

### USB / SD Card

This unit allows users to play files stored on both USB and SD cards including music, video and photo files. The USB port will also charge many devices like iPods, MP3 players and cameras.

### Built-In AM/FM Tuner

27 preset FM stations and 18 AM stations available to select.

### Built-In Weather Band Tuner

This unit can receive the latest National Oceanic Atmospheric Administration (NOAA) weather forecast reports broadcast on 7 different frequencies - with strongest station automatically selected.

### 3 Audio and Video Output locations

This unit supplies quality high power audio and video outputs to three different rooms. Room A receives 5.1 full digital surround sound. Room B and C receive standard stereo audio.

### 4 Inputs (2 Audio/Video and 2 Audio)

This unit has 2 Audio/Video inputs and 2 Audio inputs to allow users to enjoy entertainment from other sources such as Satellite Radio, Cable and Satellite TV, VCR's Digital Cameras, Video Game players and a convenient 3.5mm Audio Input on the front panel for iPods and MP3 Players. These sources must be connected through the four inputs on the unit or through additional accessory wall plates. (See pages 20-23 for accessories.)

### Low Level Output

Low level output allows connections to external amplifiers.

### Sound Equalization Control

Allows control of the Bass, Treble, Balance and four preset EQ settings.

### Clock / Sleep Timer

This unit has a built in clock that can display the time when any button is pressed and a sleep timer that turns off the radio for you.


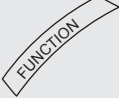





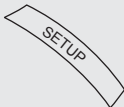
BASIC KEYS

BASIC KEYS



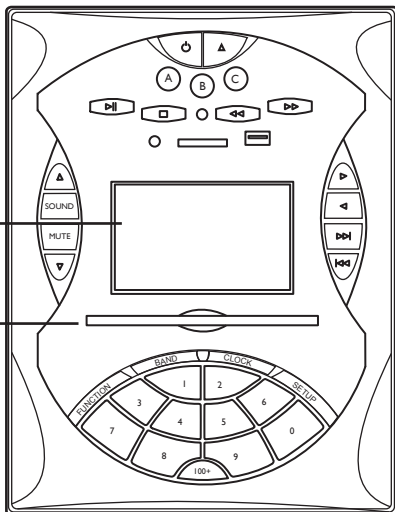
Button	Name and Function	Button	Name and Function
	<b>POWER</b> Turns the power on and off.		<b>EJECT</b> Ejects the disc from the ZX690
	<b>VOLUME</b> Increase or decrease the volume in all rooms where sound is being played.		<b>ABC Room Keys</b> Turns sound on or off in corresponding rooms A, B or C.
	<b>MUTE</b> Turn the sound off or on with this single button. Works on all rooms where the sound is being played.		<b>Left and Right Arrows</b> Radio: Press these buttons to select next frequency higher or lower. DVD: Moves menu selection.
	<b>SOUND</b> Controls under this menu include Volume, Bass, Treble, Balance and EQ controls.  Volume: 39 different levels Bass: 14 different levels Treble: 14 different levels Balance: 14 different levels EQ: Pop, Class, Rock, Flat		<b>Left and Right Double Arrows</b> Radio: Press these buttons for station seek. Disc: Move to previous track or next track on disc.
			<b>AU1 Port</b> Audio Input from MP3 or iPod player.
			<b>SD Port</b> Reads media stored on SD cards.
			<b>USB Port</b> Charges and reads media stored on USB devices.

## BASIC KEYS

Button	Name and Function	Button	Name and Function
	<b>PLAY/PAUSE</b> Press to play disc or pause playback of disc.		<b>FUNCTION</b> Select between RADIO, DISC, AV1, AV2, AU1, AU2. Note: Pressing and Holding the FUNCTION button for 10 seconds will re-boot the radio and reset all defaults. It will leave the radio off. Press the on button to continue operation.
	<b>STOP</b> Press to stop playback of disc. Press Play to continue the playback		<b>BAND</b> Allows you to select FM1, FM2, FM3, AM1, AM2 or Weather Band.
	<b>FAST FORWARD</b> <b>Radio:</b> Scan through all higher preset stations. <b>Disc:</b> Select different levels of fast forward.		<b>Clock</b> Press this to see time. This function works in all modes and even when the unit is turned off.
	<b>FAST REWIND</b> <b>Radio:</b> Scan through all lower preset stations. <b>Disc:</b> Select different levels of fast reverse.		<b>SETUP</b> Press for DVD setup menu.

### DISPLAY

Shows all functions occurring within the ZX690



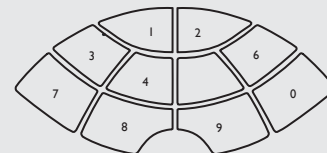
### DISC INSERT

Unit holds a single disc. The disc inserts and ejects from this opening.

### 0-9 NUMBERS

**Radio:** Press to select preset stations. For details on setting preset stations please see page 4.

**Disc:** Selects different tracks on CD and different chapters on DVD.

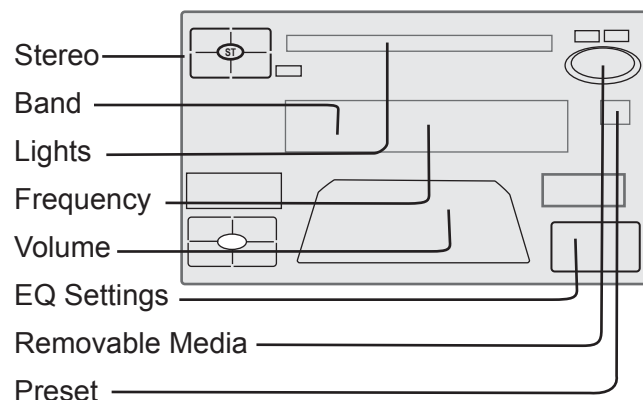


### 100+

**Radio:** N/A

**Disc:** Press the 100+ area on the "0" button to select tracks numbered higher than 100 on MP3's.

### DISPLAY INFORMATION



## RADIO Using the Main Unit



1. 2. 3.

It is important to understand what is shown on the digital display:

1. Band Indicator: Indicates the radio band. FM 1, 2, 3 or Weather Band channel 1 to 7
2. Frequency Indicator: Indicates the radio frequency.
3. Preset Number Indicator: Indicates the preset station is selected.

The radio is divided into five bands; FM1, FM2, FM3, AM1, AM2 and Weather Band.



### How to select the Radio Reception Mode

Push the BAND button and the unit switches to Radio immediately. Or, push the FUNCTION button until RADIO shows on the digital display.

### How to preset the desired station to the selected push-button

To preset 93.9 MHz (frequency 93.9 MHz and FM1 band is used as an example only) at No.6 of FM1 band, the user needs to switch to the FM1 band first and push left or right tuning button to tune to 93.9MHz. Then push and hold the No. 6 button for 3 seconds. FM1 93.9 MHz CH6 appears on the digital display. The station has now been preset.

### HOLD Until Blinking

### How to recall the preset stations

A station preset at No. 5 position on the FM2 band, and this station is desired, then push the BAND button repeatedly until FM2 appears on the digital readout, and then push the No. 5 button.

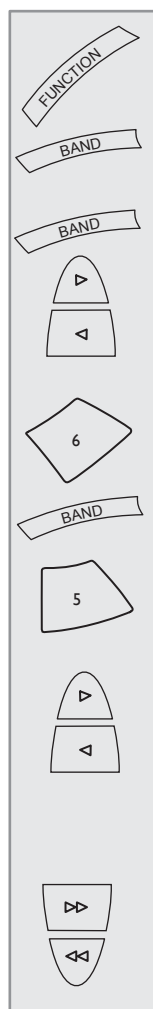
### Manual Tune Up or Down

Push right tuning button to move channel up and left tuning button to move channel down.

### Auto search for an available station

Push to auto search for an available station at a higher or lower frequency.

When this function is selected the unit will stay at the selected station until another function is selected.



**RADIO Using The Main Unit****Best Station Memory**

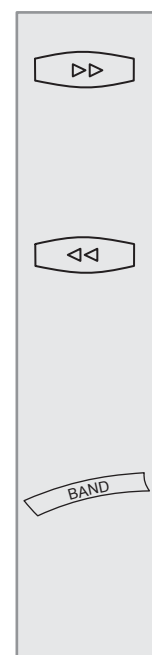
While in FM1 if you press the FAST FWD button the radio will start scanning from low to high frequencies. Each strong station found will be stored in a preset button until all 27 FM presets are full. You can also do this with the AM band. There are 18 presets available for the AM band.

While in FM1 if you press the FAST RWD button the radio will scan frequencies from high to low and store stations until all available presets are full. This will also work on the AM band.

**Weather Band Reception**

Press the BAND button to select the Weather Band.

Once the unit is set on the Weather Band function, it will automatically search for an available station among the 7 preset US Weather Bureau frequencies. When the signal is not strong enough to receive the last weather band station, the unit will continue to search for another weather band station. The user can also manually select a weather band station by pressing any of the 1-7 preset number frequencies.



RADIO CLOCK

**Note:** Since the broadcasts are local weather and information, the transmission power is usually very low (much less than AM or FM stations) so you will usually receive only one station unless you are on the edge of two or more broadcast signals. The most you will receive is two or three and that is rare. Depending on where you are located, there is a possibility you will receive only a very weak signal or none at all. Also, similar to AM and FM signals, Weather Band signals are subject to surrounding conditions, weather, obstructions of the signal by hills or mountains, etc..

**XM Satellite Radio (Optional)**

See page 20.

**Clock - Setting the time**

To set the clock to current time do the following:

Turn the radio unit on.

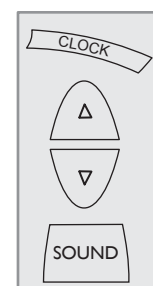
Press and hold the CLOCK button for 5 seconds. Hour will flash.

Use the VOLUME UP/DOWN to set correct hour.

Press SOUND button move to minutes. Minutes will flash.

Use the VOLUME UP/DOWN to set correct minutes.

Press the CLOCK button to memorize.





## DVD/WMA/CD/MP3/MP4 Using the Main Unit

**01-02-05:15**

1. 2. 3.

It is important to understand what is shown on the digital display:

1. Displays the Title of the DVD.
2. Displays the Chapter on a DVD or Track on a CD/MP3.
3. Displays the elapsed time on DVD, CD/MP3.



### To Load a Disc

There are several ways to select and load a disc in the ZX690.

If you have left a disc in the unit you will have to press FUNCTION on the front panel until DISC shows on the display. If you are using the remote, press the DISC button. Either of these options will start the disc playing.

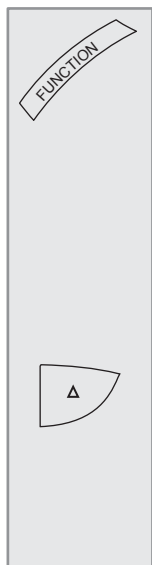
Another way to play a disc is to insert it into the slot. The unit will switch to disc by itself.

### Eject a Disc

Regardless of which function is playing, if the eject button on the front panel or the remote control is pushed, the unit will stop playing and eject the disc. The unit will keep the disc in the slot with EJECT showing on the Digital Display.

If there is no disc inside the unit, a disc placed in the slot will be taken inside automatically with LOADING showing on the Digital Display.

**REMARK:** When the unit ejects and the disc isn't removed after 1 minute, the unit will automatically reload the disc. This feature protects the disc from being dropped and damaged.





**DVD/WMA/CD/MP3/MP4 Using the Main Unit****Play / Pause**

Normally, when the unit accepts a disc with no Playback Control, the unit will play the disc from the beginning. When a Playback Control exists, the user needs to push the PLAY button to start to play the disc. If the user pushes this button again, the unit will pause the disc. To release Pause, push this button again, and play will continue.

**Stop**

When the unit is playing, push the STOP button to stop playing the disc.

**Fast Forward / Fast Reverse**

Regardless whether you use fast forward or fast reverse, (during DVD mode) there are 6 different speeds to select from: 1X\_2X\_4X\_8X\_16X\_20X. To select a normal speed, push the PLAY button. The unit will immediately play the disc at a normal speed. On the unit the PLAY button must be pressed second time to Play from Pause.

**Previous / Next**

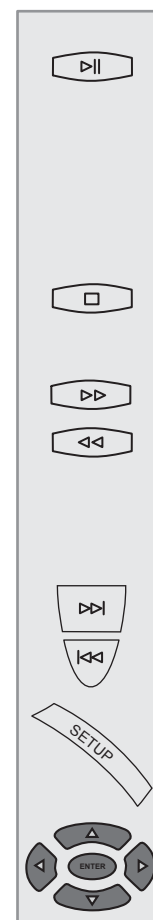
Pushing the Previous button, the unit will play the disc from the beginning of the previous track. Pushing the Next button, the unit will play the disc from the beginning of the next track.

**Setup**

Press the SETUP button on the unit when the unit is in the Disc player mode. The screen will display the system setting menu. Navigate the Menu pages by using remote cluster buttons.

**To Load USB and SD Media**

Insert USB device or SD card into proper socket on the front of the radio to begin playing media. To view, navigate and select between music and video/photo media the TV or Monitor must be on and set to AV mode. Use remote cluster buttons to navigate on screen menu.



DVD  
CD  
WMA  
MP3  
MP4

**Because of variations in 3rd party recording methods some discs, USB devices or SD cards may not play on this unit.**






















## REMOTE CONTROL



Button	Name and Function
	<b>Power</b> Turns the power on and off.
	<b>Eject</b> Use this button to eject the Disc from the unit.
	<b>Disc</b> Press to select Disc mode when a disc is already in the unit.
	<b>Radio</b> This function selects the Radio.
	<b>USB / SD</b> Press to select USB or SD.
	<b>INPUT</b> Press to select AU1, AU2, AV1 or AV2.
	<b>BAND</b> Once the radio is selected, this button allows you to select FM1, FM2, FM3, AM1, AM2 or the Weather Band.

Button	Name and Function
<div> </div>	<b>A, B and C Rooms</b> Turns sound on or off in the corresponding rooms A, B or C.
<div> 1 2 3  4 5 6  7 8 9  0 </div>	<b>0-9 NUMBERS</b> <b>Radio:</b> Press to select preset stations. For details on setting preset stations please see page 4. <b>Disc:</b> Selects different tracks on CD and chapters on DVD.
	<b>100+</b> Radio: N/A Disc: Press the 100+ button to select tracks numbered higher than 100 on MP3s.
	<b>SUBTITLE (SUB-T) / RETURN</b> DVD Only- Returns to previously selected tracks. Press to select language or to turn off subtitles. Press and hold for 3 seconds to return to previous chapter.
	<b>REPEAT</b> Press once to repeat last CD/WMA track selected. Pressing twice repeats all for continuing play. Press again to turn repeat off.
	<b>ZOOM</b> DVD Only - Pressing ZOOM will enlarge picture 2X, 3X, 4X, 1/2, 1/3, 1/4 and Off.
	<b>AUDIO</b> DVD Only- Adjusts the surround sound mode as well as selects the language. Must be set before play.
	<b>CLUSTER BUTTONS</b> Press the appropriate button to move around any menus that are selected on screen. Center button is the "select" button.

## ZX690 REMOTE CONTROL KEYS

Button	Name and Function	Button	Name and Function
	<b>VOLUME</b> Press to increase or decrease the sound volume.		<b>PREVIOUS / NEXT</b> Radio Mode: Press to select higher or lower stations. Disc Mode: Press to select previous or Next track or chapter.
			
	<b>MUTE / BC</b> Turn the sound off or on with this single button. Works on all rooms where sound is being played. Pressing the BC button for 5 seconds returns the system to default settings.		<b>SLEEP</b> Selects timing for delayed turn-off mode. Available increments 10, 20, 30, 40, 50, 60, 70, 80 and 90 Minutes.
	<b>CHANNEL / NEXT</b> Functions same as PREVIOUS / NEXT. See Below.		<b>CLOCK</b> Press to view user set clock time at any time.
			<b>Learning Remote Buttons</b> The ZX690 button sets remote functions to the ZX690 Radio. This is the default. Three other buttons have learning ability. The learning procedure is explained on page 10.
	<b>SETUP</b> Press for system Language, Audio, Video, Video, Speaker, and Digital Setup menus.		
	<b>MENU / DISPLAY</b> DVD Only- Selects upper menu. Press the button for 3 seconds to display the status of the DVD or CD that is currently playing.		
	<b>SOUND</b> Menu controls include Volume, Bass, Treble Balance, EQ and Time. Controls can be modified differently for each room.		
	<b>SLOW</b> Slows on-screen action in DVD. Press to select from 7 different levels of Slow.		
	<b>STOP</b> Press to stop play.		
	<b>PLAY / PAUSE</b> Press to play. Press again to pause play.		
	<b>FAST REVERSE / FORWARD</b> Press to select different levels of Fast Reverse or Fast Forward. Press Play to resume selection.		
			

**ZX690 REMOTE CONTROL OPERATION****POWER**

Press "POWER" button to turn On/Off the power.

**EJECT: To Eject Disc From Unit**

When the unit is in Disc Play mode, pushing the "EJECT" button will eject the disc. When the unit ejects a disc and the disc is not removed after 1 minute, the unit will automatically reload the disc.

**BAND**

Push the "BAND" or "RADIO" button and the unit switches to Radio immediately. During radio mode, press "RADIO" again to switch receiving band.

**NUMBER BUTTONS**

**Radio Mode:** You can select one of the 9 stored stations on each band by pressing any one of the number buttons (1-9).

**Disc Mode:** You can select any track directly by using the number buttons (0-100+). For example, if you need track number 25, first press the number 2 and then the number 5 and the corresponding track number 25 will begin to play.

**PROGRAM**

**CD/VCD Mode:** You can set the program order to play, by following the steps below. Press "PROGRAM" button and the LCD displays programming P00:00.

You can set the program order to play them by using (0-100+) number button, and then press "PLAY/PAUSE" to play.

**Note:**

- (1) Program does not function in playing MP3.
- (2) CD Only- Allows you to re-arrange the playback order of the individual tracks differently from the order on the original disc.
- (3) If there are mistakes in programs, you can press "PROGRAM" button again then press "PROGRAM" button to play in order.

**REPEAT**

**DVD Mode:** Press "REPEAT" to repeat the current track being played. Press it twice to repeat playing all of the tracks.

**CD, MP3, VCD Mode:** Press "REPEAT" to repeat the current track being played. Press it twice to cancel the repeat function.

**ZOOM KEY**

**DVD, VCD Mode:** Press the "ZOOM" button once to enable 2X zoom mode. Pressing the "ZOOM" button repeatedly moves the zoom mode through 3X, 4X, 1/2X, 1/3X, and 1/4X zoom levels. Press "ZOOM" again to exit the zoom mode.

**VOLUME**

Press the "VOLUME" (+ or -) button to increase or decrease the volume level respectively.

**MUTE**

Press the "MUTE" button to turn off the sound in all rooms A, B, and C. Press it again to resume the previous sound levels.

**MENU / DISPLAY**

Quick press selects MAIN MENU.

Press "NAVIGATION" buttons to make your selection, then press "ENTER" button to confirm.

## REMOTE CONTROL OPERATION

### SOUND: Selector (Radio Mode)

Repeatedly pressing the "SOUND" button moves you through 6 modes. VOLUME, BASS, TREBLE, BALANCE, EQ and TIME. Adjustment in anyone of these modes is done by pressing the "VOLUME" (+ or -) key.

### DISPLAY On Screen Display (OSD)

**CD/VCD/DVD Mode:** Press the "DISPLAY" button and the OSD will show single track elapsed time, single track remaining time or entire disc time, It also shows the track being played and the amount of the whole disc.

**MP3 Mode:** Press the "DISPLAY" button and the OSD will show single track elapsed time only.

### SLOW: Slow Advance / Slow Reverse

**DVD Mode:** Press "SLOW" button to enable 2X Slow Advance mode. Pressing the "SLOW" button repeatedly moves the slow mode to 3X and 4X slow advance. Continued pressing of the "SLOW" button will reverse to 5X Slow Reverse and 6X Slow Reverse. Press "SLOW" again to exit the slow mode.

**VCD Mode:** Press "SLOW" button to enable 1X Slow Advance mode. Pressing the "SLOW" button repeatedly increases the slow mode to 2X and 3X slow advance. Press "PLAY" button to exit the slow mode.

*Note: The slow mode is not available for MP3 and CD media.*

### STOP: Stop the playback

**DVD, VCD, CD Mode:** Press "STOP" to suspend playback mode. PRESTOP will display on the TV Screen. Pressing "STOP" a second time will end all disc playback.

### PLAY/PAUSE

Press "PLAY/PAUSE" button to suspend the playback of CD, MP3, MP4, VCD and DVD media.

Press it again to return to normal playback mode.

### PREVIOUS / NEXT

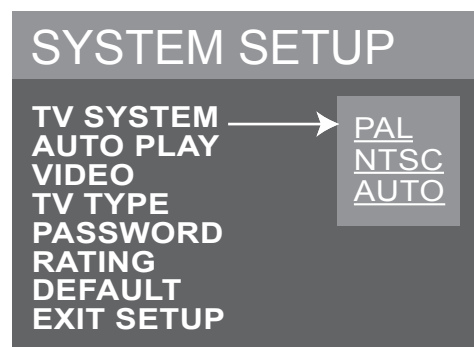
**DVD, VCD Mode:** Press the "ZOOM" button once to enable 2X zoom mode. Pressing the "ZOOM" button repeatedly moves the zoom mode through 3X, 4X, 1/2X, 1/3X, and 1/4X zoom levels. Press "ZOOM" again to exit the zoom mode.

### SETUP KEY

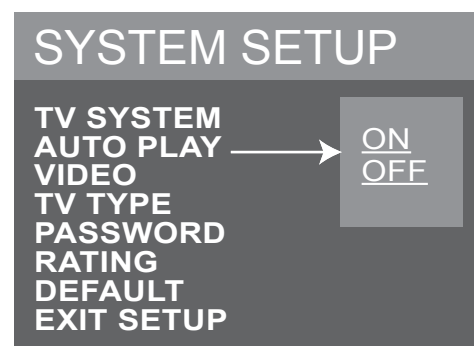
Press the "SETUP" button to activate the System Setup on screen display (OSD) menu .

Use the arrow keys to navigate the following OSD menu options.

### TV SYSTEM SETUP

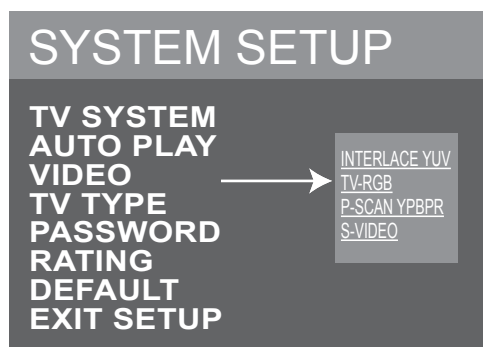


### AUTO PLAY

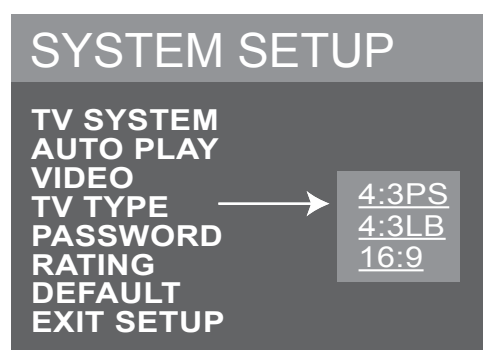


## REMOTE CONTROL OPERATION

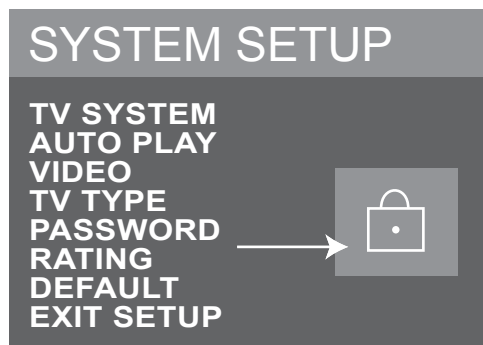
### VIDEO



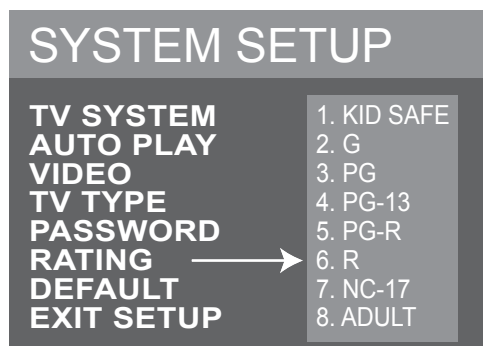
### TV TYPE



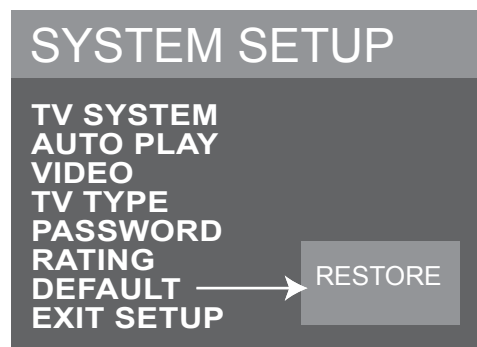
### PASSWORD



### RATING



### DEFAULT



### LANGUAGE SETUP



### AUDIO



### SUBTITLE



## MENU LANGUAGE

**LANGUAGE SETUP**

OSD LANGUAGE	ENGLISH
AUDIO LANG	CHINESE
SUBTITLE LANG	JAPAN
MENU LANG	FRENCH
	SPANISH
	→ PORTUGUESE
	LATIN
	GERMAN
	OFF
EXIT SETUP	

## AUDIO OUT

**AUDIO SETUP**

AUDIO OUT	→ SPDIF/OFF
KEY	SPDIF/RAW
	SPDIF/PCM
EXIT SETUP	

## KEY

**AUDIO SETUP**

AUDIO OUT	→	—	— #
KEY		—	— +4
		—	— +2
		—	— 0
		—	— -2
		—	— -4
		—	— -b
EXIT SETUP			

## BRIGHTNESS

**VIDEO SETUP**

BRIGHTNESS	→	—	— -12
CONTRAST		—	— -10
HUE		—	— -8
SATURATION		—	— -6
SHARPNESS		—	— -4
		—	— -2
		—	— -0
EXIT SETUP			

## REMOTE CONTROL OPERATIONS

### CONTRAST

**VIDEO SETUP**

BRIGHTNESS	→	—	— -12
CONTRAST		—	— -10
HUE		—	— -8
SATURATION		—	— -6
SHARPNESS		—	— -4
		—	— -2
		—	— -0
EXIT SETUP			

### HUE

**VIDEO SETUP**

BRIGHTNESS	→	—	— -12
CONTRAST		—	— -10
HUE		—	— -8
SATURATION		—	— -6
SHARPNESS		—	— -4
		—	— -2
		—	— -0
EXIT SETUP			

### SATURATION

**VIDEO SETUP**

BRIGHTNESS	→	—	— +6
CONTRAST		—	— +4
HUE		—	— +2
SATURATION		—	— -0
SHARPNESS		—	— -2
		—	— -4
		—	— -6
EXIT SETUP			

### SHARPNESS

**VIDEO SETUP**

BRIGHTNESS	→	—	— +6
CONTRAST		—	— +4
HUE		—	— +2
SATURATION		—	— -0
SHARPNESS		—	— -2
		—	— -4
		—	— -6
EXIT SETUP			

REMOTE



## REMOTE CONTROL OPERATION

### DOWNMIX

**SPEAKER SETUP**

DOWNMIX → LT/RT  
SUBWOOFER STEREO  
CENTER DELAY VSS  
REAR DELAY 5.1 CH  
BASS MODE  
EXIT SETUP

### SUBWOOFER

**SPEAKER SETUP**

DOWNMIX  
SUBWOOFER → OFF  
CENTER DELAY ON  
REAR DELAY  
BASS MODE  
EXIT SETUP

### CENTER DELAY

**SPEAKER SETUP**

DOWNMIX  
SUBWOOFER  
CENTER DELAY → - | - +  
REAR DELAY 4MS  
BASS MODE 2MS  
0MS  
EXIT SETUP

### REAR DELAY

**SPEAKER SETUP**

DOWNMIX  
SUBWOOFER  
CENTER DELAY  
REAR DELAY → - | - +  
BASS MODE 12MS  
6MS  
0MS  
EXIT SETUP

### BASS MODE

**SPEAKER SETUP**

DOWNMIX  
SUBWOOFER  
CENTER DELAY → ALL LG SPK  
REAR DELAY ALL SM SPK  
BASS MODE MIXED SPK  
EXIT SETUP

### OP MODE

**DIGITAL SETUP**

OP MODE → LINE OUT  
DYNAMIC RANGE RF REMOD  
DUAL MONO  
EXIT SETUP

### DYNAMIC RANGE

**DIGITAL SETUP**

OP MODE  
DYNAMIC RANGE → - | - FULL  
DUAL MONO 6/8  
4/8  
2/8  
OFF  
EXIT SETUP

### DUAL MONO

**DIGITAL SETUP**

OP MODE  
DYNAMIC RANGE  
DUAL MONO → STEREO  
MONO L  
MONO R  
MIX MONO  
EXIT SETUP

## ZX690 LEARNING REMOTE CONTROL OPERATION

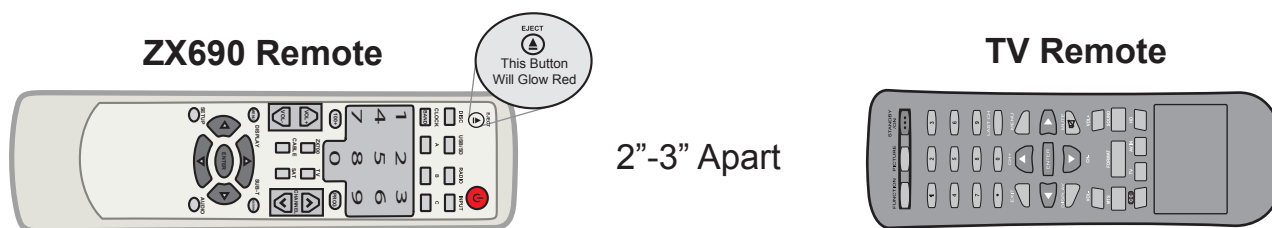
### Learning Operation

The remote is preset to work with the ZX690 when the “ZX690” button is pressed first. The remote is also capable of learning “TV”, “Cable” and “Satellite” functions using the following instructions.

*It is advised that you read steps 1 to 3 before attempting to program functions.*

### To Learn TV Functions do the following:

1. Point the top of ZX690 remote 2 to 3 inches from the top of the TV remote.



2. Press and hold the “TV” button on the ZX690 remote for 3 seconds and release when the “EJECT” button in the upper left corner lights red. This puts the remote in learning mode.

Note: it will remain light for only 10 seconds

Reminder: The ZX690 remote will learn only one function at a time.

3. First let's program your TV's POWER button. While the “EJECT” button is lit press the ZX690 “POWER” button and the red light will slow flash. Note: If 10 seconds has passed and the learning light has gone out you will have to start back at #2. While this light is slow flashing, quickly press the POWER button on the TV remote. If the red light quickly flashes three times and then continues steady you have succeeded. To memorize and to exit learning mode press “TV” on the ZX690 remote. To verify press the “TV” button on the ZX690 remote and then press the “POWER” button. The TV's power should come on. If not you will have to repeat the above process.

4. To continue to memorize more TV functions on the ZX690 remote do the following: Press and hold the “TV” button on the ZX690 remote for longer then 3 seconds and release when the “EJECT” button in the upper left corner lights red. This puts the remote in learning mode. While the “EJECT” button is lit press the ZX690 “VOLUME UP” button and the red light will slow flash. While this light is slow flashing, quickly press the VOLUME UP button on the TV remote. If the red light quickly flashes three times and then continues steady you have succeeded. From this point you can continue to memorize any button using the same operation. When you are finished memorizing functions Press the “TV” button on the ZX690 remote to exit learning mode.

### SAT, Cable Remote Learning

Press and hold SAT or Cable button on the ZX690 remote for more than 3 seconds and repeat above learning steps 2-4.

## ZX690 SPECIFICATIONS

General Dimension	6-5/8" 240mm (W) X 9-3/8" (H) X 4-1/2" 120mm (D)
Net Weight	6 lbs 3.35Kg
Voltage	14.4V DC (10.8V - 15.1V allowable)
Maximum Current Consumption	10A
Audio 10 separate Digital Amplifiers	
Total Maximum Power Output	400W @ 4 $\Omega$
Total Continuous Power Output	200W @ 4 $\Omega$
Load Impedance	4 $\Omega$ (4-8 $\Omega$ allowable)
Frequency Response	10Hz - 20,000Hz +/- 1dB
Audio Signal against Noise Ratio	90dBA
Cross Talk Ratio for Stereo	75dBA
Audio Distortion	under 1% @ 60dB
Tone Control	
Bass	$\pm 7$ dB (100Hz)
Treble	$\pm 7$ dB (100Hz)
DVD Deck Section	
Discs Played	MPEG4,DVD,VCD1.0/1.1/2.0/3.0,MP3,MP4,CD,CD-R,CD-RW,PICTURE-CD
Video System	AUTO/PAL/NTSC
Mounting Angle	0 to +/- 30°
Video Section	
Video System	4:3 Letter Box and 4:3 Pan Scan, 16:9
Video Output level	1.0Vp-p +/-0.2V 75ohms
Horizontal Resolution	500
AM Tuner Section	
Frequency Range	530 - 1710KHz (U.S.A.)
IF Range	450KHz
Usable sensitivity (-20dB)	25dB
AM	18
FM Tuner Section	
Tuning Range	87.5-107.9MHz (U.S.A.)
IF Range	10.7MHz
Usable sensitivity (-30dB)	15dB
Signal-to-noise Ratio	60dB
Stereo Separation	30dB (1KHz)
Frequency Response	30-15000Hz
FM	27

## SIMPLE TROUBLESHOOTING GUIDE

Problem	Cause/Solution
No Power	<ul style="list-style-type: none"> <li>Check and make sure whether the fuse is blown, replace fuse with proper value if necessary.</li> </ul>
Some errors occur in the LCD or no function when pressing the button.	<ul style="list-style-type: none"> <li>Turn off the unit and restart the unit again. Use Factory Default Restart.</li> </ul>
Poor radio reception or static.	<ul style="list-style-type: none"> <li>Antenna may not be the proper length. Make sure the antenna is fully extended. Antenna may be broken. Replace antenna.</li> <li>The broadcast signal is too weak.</li> <li>The antenna is poorly grounded. Check and make sure the antenna is properly grounded at it's mounting location.</li> </ul>
Disc cannot be loaded	<ul style="list-style-type: none"> <li>Disc is loaded in the machine. Clear the disc by pressing eject.</li> </ul>
No Picture.	<ul style="list-style-type: none"> <li>The Video line from the main unit to the TV is not connected properly. Check connections.</li> <li>Improper setting of the TV SYSTEM. Set the TV SYSTEM to "PAL" or "NTSC", according to the connected television.</li> </ul>
Disc error appears.	<ul style="list-style-type: none"> <li>The disc may be damaged or dirty. Clean disc and retry.</li> </ul>
When there is no color on video.	<ul style="list-style-type: none"> <li>Turn off the unit and restart the unit again. Use Factory Default Restart.</li> </ul>

### FACTORY DEFAULT RESTART

Press and hold FUNCTION button for 10 seconds - Unit will shut off. Restart unit by pressing the ON button. Factory defaults will be reset with this type of restart.

### NOTE:

If any of the problems persist after check list has been made, consult your nearest service dealer. Never attempt to disassemble your unit by yourself.

## WARNINGS AND PRECAUTIONS

### WARNING

To reduce the risk of electrical shock, do not remove cover(or open unit). NO USER SERVICEABLE parts are inside. Refer servicing to QUALIFIED SERVICE PERSONNEL.

The design and manufacture of this player takes personal safety into consideration. However, any improper operation may result in electric shock, fire, or other hazard.

Due to the dangerous voltages inside the player, DO NOT open the cabinet by yourself to prevent electric shock. Please contact a professional technician to preform any service needed. Please use only components recommended by factory when replacement is necessary.

Please turn unit off when not in use.

Use a dry, soft cloth to clean face with the system turned off.

### PRECAUTION

Moisture may cause the lens on loader in this unit to malfunction. To remedy the problem, turn unit on, eject disc and run 1-2 hours to vaporize moisture inside the unit.

Do not repeatedly turn unit off and on. After turning unit off wait 10 seconds before turning on again.

Do not use broken, scratched, or twisted discs in player. This could result in damage to the unit. Use only 5" 12cm discs in this unit.

## FCC Compliance

### 15.19 Labeling requirements.

(a) In addition to the requirements in part 2 of this chapter, a device subject to certification, or verification shall be labeled as follows.

(1) Receivers associated with the operation of a licensed radio service, e.g., FM broadcast under part 73 of this chapter, land mobile operation under part 90, etc., shall bear the following statement in a conspicuous location on the device:

This device complies with art 15 of the FCC Rules. Operation is subject to the condition that this device does not cause harmful interference.

(2) A stand-alone cable input selector switch, shall bear the following statement in a conspicuous location on the device:

This device is verified to comply with part 15 of the FCC Rules for use with cable television service.

(3) All other devices shall bear the following statement in a conspicuous location on the device:

This device complies with part 15 of the FCC Rules. Operation is subject to the following two conditions:

(1) This device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

## Warranty

### ONE (1) YEAR LIMITED WARRANTY

The Manufacture warrants to the original retail purchaser of this unit that is or any part therein, under normal use and condition, be proven defective in material or workmanship within 1 year from the date of original purchase, such defect's will be repaired or replaced at the manufactures option without charge for parts and repair labor.

This warranty does not extend to the elimination of externally generated static or noise, to the correction as antenna-generated noise or to the cost incurred to correct this noise. The warranty does not cover the removal or the reinstallation of this unit or damage to any CD's, Speakers, accessories, or the vehicle's electrical system.

This warranty does not cover the cabinet appearance or apply to the unit or any part of the unit that, in the opinion of the manufacture, has been damaged through alterations, improper installation, mishandling, misuse, neglect, or accident, THE EXTENT OF THE MANUFACTURE'S LIABILITY UNDER THIS WARRANTY IS LIMITED TO THE REPAIR OR REPLACEMENT PROVIDED ABOVE , AND IN NO EVENT SHALL THE MANUFACTURE'S LIABILITY EXCEED THE PURCHASE PRICE PAID BY THE ORIGINAL BUYER FOR THE UNIT.

This warranty extends only to the original purchaser of the unit and is not transferable.

Some states do not allow limitations on how long an implied warranty lasts, and some states do not allow the exclusion or limitation on incidental or consequential damages, so the above limitation of exclusions may not apply to you. This warranty gives you specific legal rights.

To obtain repair or replacement within the terms of this warranty, Email your request to: [warranty@concertone.com](mailto:warranty@concertone.com); A "Return Authorization Number" will be issued within 1 business day along with instructions for returning the unit.

### CONCERTONE Warranty Department

PO Box 6721  
San Pedro, CA 90734

## ACCESSORIES

### Input Options

The ZX690 has multiple input options. These inputs allow units such as Satellite TV, Cameras, VCR's and other audio video equipment to be connected to the ZX690. Optional wall plates are available for iPod's and XM Satellite radio. Multi-input wall plates are also found installed in select coaches and trailers.

## XM Satellite Radio

### ZW100S WALL PLATE

The ZW100S Wall Plate is an optional plate to be used with the Delphi SkyFi3 XM Radio Satellite Receiver.

### INSERTING

To insert the receiver, press the center of the cradle as indicated at right. The cradle will tilt forward so that the satellite receiver can be loaded. Once in the cradle, push the receiver downward to make a positive connection. Do this gently so that no damage to the connections occur.

Push the top of the satellite receiver and cradle back into the wall plate until it locks into place. Use the FUNCTION button on the ZX690's Main Unit and select AU2 to listen to XM Radio through your entertainment system.

### REMOVAL

To remove the SkyFi3 Receiver push at the top center of the unit until the lock releases with a click. Allow the receiver to tilt forward. Lift the receiver straight out of the wall plate.

ZW100S  
Wall Plate



XM Satellite Radio Subscription Required.  
Receiver may be sold separately.



## iPod Player

### iPod Audio / Video Player

ZW150 iPod Wall Plate is an optional plate that can be used with any “dockable” iPod Audio or Video player.

### INSERTING

To use your iPod with the ZW150 wall plate select the appropriate adapter to align your iPod player with the connector. Adapters included with the ZW150 are designed to allow your iPod to fit firmly into the wall plate.

With your iPod mounted in the carrier push the cradle as shown at left and it will tilt forward so that the iPod player with the carrier can be loaded.

Once in the cradle push downward to make a positive connection. Do this gently so that no damage to the connections occur.

Push the top of the iPod player and cradle back into the wall plate until it locks into place. Use the FUNCTION button on the ZX690 and select INPUT AV2 to listen to music or videos from your iPod player.

### REMOVAL

To remove the iPod push at the top center of the unit until the lock releases with a click. Allow the iPod to tilt forward. Lift it straight out of the wall plate.

## Adapter Plates



iPod Nano

iPod Mini

iPod Video

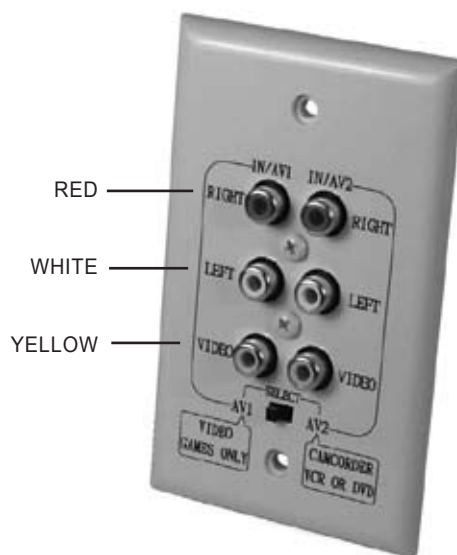
iPod is a registered trademark of Apple Computers.  
XM is a registered trademark of XM Satellite Radio Holdings Inc..

## ACCESSORIES

### Wall Plates

FR-WP6RCA

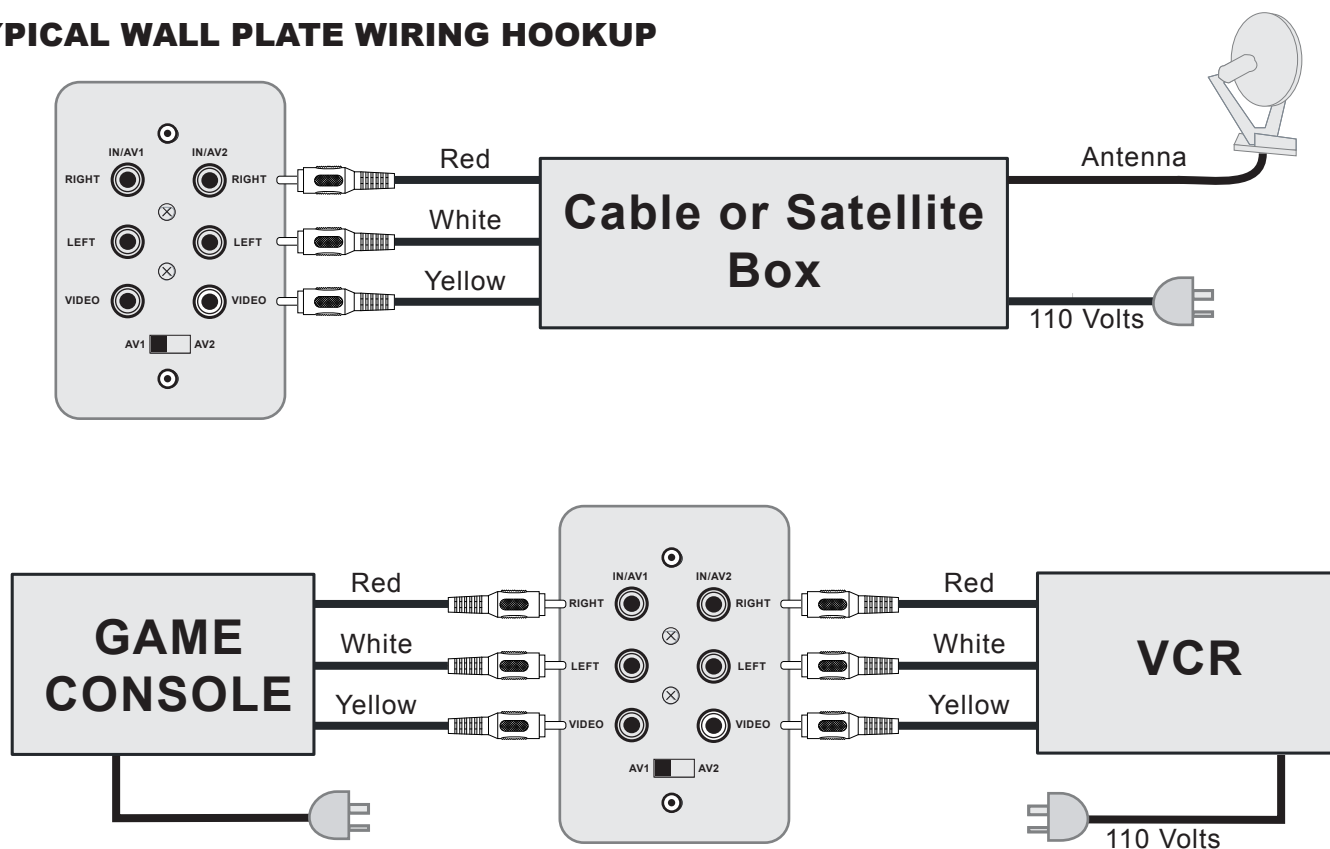
This wall plate is used for games and other Audio/Video inputs. This plate is normally connected to INPUT AV1 on the ZX690. To use this plate, press the FUNCTION button on the radio panel until AV1 shows in the display. When using the remote control press the INPUT button until AV1 shows in the display.



Game consoles should be connected to the left side of the plate (IN / AV1). There is a right and left channel for audio and a video connection. Standard audio video cables with RCA male connectors can be used. Using the select switch on the plate select AV1 to play games.

VCR's, cameras, cable boxes or other audio video inputs can be connected to the right side of the plate (IN / AV2). Move the select switch to AV2 (to the right) when using this input.

### TYPICAL WALL PLATE WIRING HOOKUP



### FR-WP8RCA

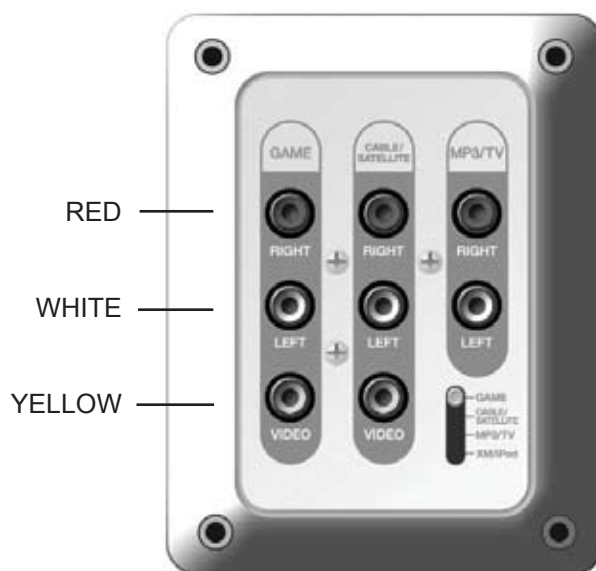
This wall plate, when installed, is used for multiple inputs. This plate is normally connected to INPUT AV1 on the ZX700. To use this plate, press the FUNCTION button on the radio panel until AV1 shows in the display. When using the remote control press the INPUT button until AV1 shows in the display.

Use the "Game" input for games only. Using the switch on the plate select Game.

For Cable or Satellite boxes use the "Cable/Satellite" center position on the plate and select Cable/Satellite on the switch.

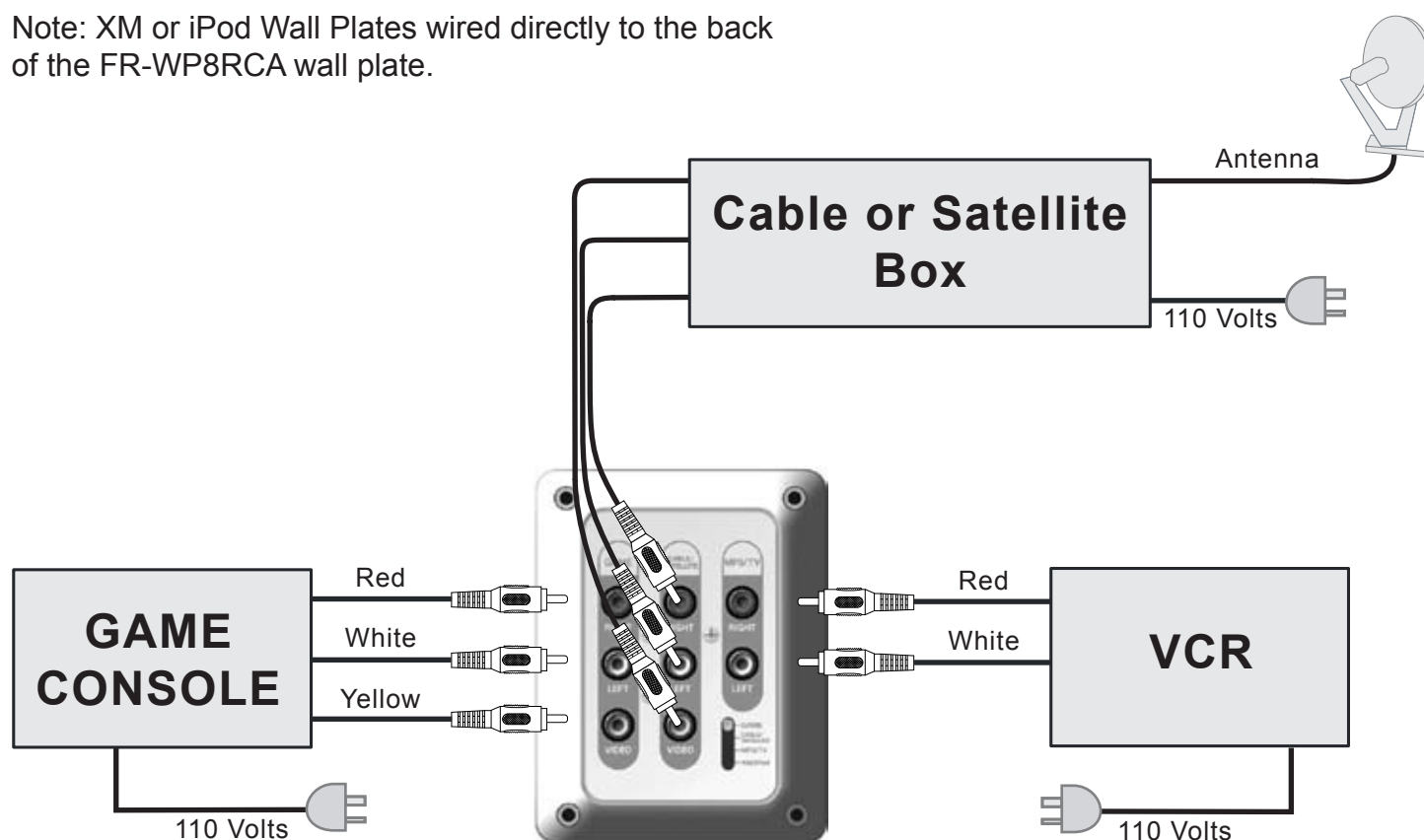
For MP3 players or TV audio use the right side connections and select MP3/TV on the switch.

If the XM Satellite radio wall plate or the iPod wall plate is installed in your trailer or coach with this plate you must select XM/iPod on the switch for them to operate.

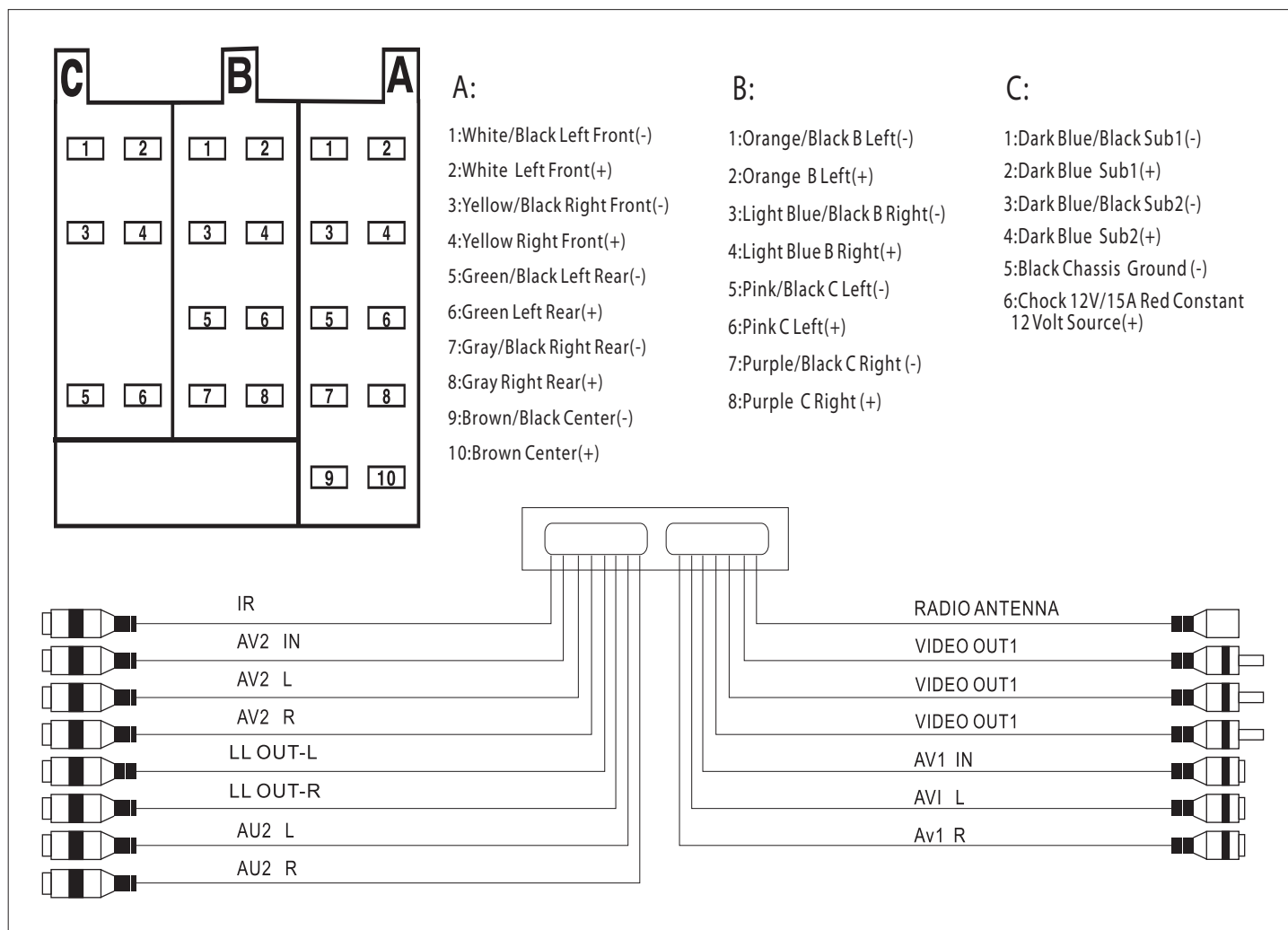


### TYPICAL WALL PLATE WIRING HOOKUP

Note: XM or iPod Wall Plates wired directly to the back of the FR-WP8RCA wall plate.



## WIRING DIAGRAM



## Notes



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CT-ZX690-120708